LOCAL STORMS AND TORNADOES.

The month was quite free from destructive tornadoes. Local windstorms of more or less severity occurred in various sections of the country.

A violent local storm of wind and rain, having some of the characteristics of a hurricane, struck the Florida coast about 25 miles east of Apalachicola. Great damage was done to the shipping in the harbor and the buildings on land. At Carrabelle fourteen barks were wrecked and a large number of smaller craft destroyed. Six persons lost their lives.

According to Mr. A. J. Mitchell, Section Director, Florida Climate and Crop Service, the diameter of the storm was not more than 40 miles and its force was expended before it had progressed 50 miles inland. Storms of this character on the Gulf coast are not as infrequent as might be supposed although it rarely happens that so much violence is concentrated along such a short path.

The violent thunderstorms of August 2 in New York, New Jersey, eastern Pennsylvania, Delaware, Maryland, and the District of Columbia were made the subject of a special article which appears elsewhere in this REVIEW.

A series of violent thunderstorms swept across the northern part of Illinois during the afternoon and evening of the 11th.

Mr. C. E. Linney, Section Director, Climate and Crop Service of Illinois, in a communication to the Central Office, says:

> The storm seems to have advanced across Illinois at the rate of more than 45 miles per hour, crossing the State from Scales Mound to Chicago, 153 miles, in three hours and fifteen minutes. In its path much damage was done, although the damage at any one point was comparatively small. Rockford seems to have suffered most. Three lives were lost by lightning during the storm; one at Janesville, Wis.; one at Harvard, Ill., and another in Chicago, Ill. No reasonable estimate can be made of the loss or damage to property, but the reports of loss by lightning thus far received aggregate more than $9,000 and this amount is probably but a small part of the loss actually sustained.

On the evening of the 19th a number of severe local storms swept over portions of Hamlin, Deuel and Brookings counties, S. Dak. One life was lost and many buildings were so damaged as to be unfit for habitation. Probably a half dozen houses and as many more barns and outbuildings were destroyed. Much grain in the shock was damaged by the rain and wind.

An incipient tornado wrecked a house 3 miles east of Gleason, Tenn., on the 26th, killing one man and injuring two others. The funnel cloud did not touch the earth again.

One hundred and thirty lives were lost by lightning during the current month. This is the greatest number of fatal cases of lightning stroke in a single month ever before reported.

WIND.

The maximum wind velocity at each Weather Bureau station for a period of five minutes is given in Table I, which also gives the altitude of Weather Bureau anemometers above ground.

Following are the velocities of 50 miles and over per hour registered during the month:

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Amarillo, Tex	13	54	n.	Jupiter, Fla	13	52	n.
Basseterre, St. Kitts	7	72	ne.	Little Rock, Ark	25	60	nw.
Cape Henry, Va	16	50	ne.	Louisville, Ky	12	50	n.
Do	17	66	ne.	Mount Tamalpais, Cal.	7	50	nw.
Do	18	54	ne.	Do	14	61	n.
Do	19	60	ne.	Do	16	67	nw.
Cape May, N.J	6	56	w.	Do	20	91	nw.
Charleston, S. C	15	57	ne.	Do	21	71	nw.
Chicago, Ill	11	54	nw.	Do	26	88	n.
Fort Canby, Wash	9	50	se.	Do	27	64	nw.
Hatteras, N.C	16	54	ne.	New York, N. Y	5	64	nw.
Do	17	*	n.	San Juan, Porto Rico	8	66	e.
Do	18	70	se.	Sioux City, Iowa	3	59	nw.
Do	19	50	sw.				

*Anemometer cups blown away; estimated velocity 105 miles.

HUMIDITY.

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
	%			%	
New England	82	0	Missouri Valley	68	+1
Middle Atlantic	78	+3	Northern Slope	56	+5
South Atlantic	80	−2	Middle Slope	56	−5
Florida Peninsula	79	−3	Southern Slope	45	−19
East Gulf	81	+1	Southern Plateau	36	−12
West Gulf	71	−3	Middle Plateau	37	+5
Ohio Valley and Tennessee	70	−1	Northern Plateau	52	+9
Lower Lake	67	−3	North Pacific Coast	79	+1
Upper Lake	77	+3	Middle Pacific Coast	63	−5
North Dakota	68	+5	South Pacific Coast	67	+4
Upper Mississippi	71	+1			

SUNSHINE AND CLOUDINESS.

The distribution of sunshine is graphically shown on Chart VII, and the numerical values of average daylight cloudiness, both for individual stations and by geographical districts, appear in Table I.

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	5.5	+0.5	Missouri Valley	4.2	+0.1
Middle Atlantic	5.6	+0.6	Northern Slope	4.2	+0.5
South Atlantic	5.1	−0.1	Middle Slope	2.8	−1.0
Florida Peninsula	5.0	−0.2	Southern Slope	1.2	−3.6
East Gulf	4.3	−0.6	Southern Plateau	2.2	−1.2
West Gulf	2.4	−2.0	Middle Plateau	3.4	+1.2
Ohio Valley and Tennessee	4.1	−0.4	Northern Plateau	4.6	+1.6
Lower Lake	3.5	−1.0	North Pacific Coast	6.7	+2.8
Upper Lake	4.6	−0.2	Middle Pacific Coast	3.8	+1.0
North Dakota	3.8	−0.1	South Pacific Coast	2.4	−0.1
Upper Mississippi	4.4	+0.3			

ATMOSPHERIC ELECTRICITY.

Numerical statistics relative to auroras and thunderstorms are given in Table VII, which shows the number of stations from which meteorological reports were received, and the number of such stations reporting thunderstorms (T) and